Claims

1. A compound of formula I

$$R_1$$
 R_2
 R_3
 N
 R_4
 R_6
 R_5

wherein

R₁ is a residue of formula (a), (b) or (c)

(a) (b) (c)
$$R_{10}$$
 R_{11} R_{12} R_{13} R_{14} R_{15} R_{15}

 R_2 is $-(CR_{22}R_{23})_{1-3}$ - or -C(O)-;

each of R₃ and R₈ independently is S; O; or NR₂₄;

each of R_4 and R_5 independently is optionally R_{25} -substituted C_3 - C_{12} cycloalkyl, C_1 - C_{12} alkyl or saturated C_{8-12} polycyclic residue; or optionally R_{26} - and/or R_{27} -substituted aryl, aryl C_{1-4} alkyl or heteroaryl; wherein up to 4 carbon atoms of R_4 and/or R_5 are optionally substituted by S, O or NR_{24} ;

 R_6 is H; C_1 - C_6 alkyl; C_3 - C_6 cycloalkyl; or optionally R_{26} - and/or R_{27} -substituted aryl, aryl C_{1-4} alkyl or heteroaryl;

R₇ is CR₂₈ or N;

 R_9 is a direct bond; -($CR_{22}R_{23}$)₁₋₂-; or NR_{24} ;

each of R_{10-23} and R_{28} independently is H; F; CI; Br; C_1 - C_6 alkyl; C_2 - C_6 alkoxyalkyl; C_1 - C_6 halogenoalkyl; C_3 - C_6 cycloalkyl; optionally R_{26} - and/or R_{27} -substituted aryl or heteroaryl; $CONR_{29}R_{30}$; $COOR_{29}$; CN; NO_2 ; or OR_{31} ; or

two heteroatoms selected independently from N, O and S; or

two of R_{10-19} which are attached to the same carbon atom, together with the carbon atom to which they are attached, form a 3-7 membered nonaromatic ring optionally containing up to

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R₁₇ and R₁₈, together with the C atoms to which they are attached, form a 4-7 membered nonaromatic ring optionally containing up to two heteroatoms selected independently from N, O and S; or

 R_{20} and R_{21} , together with the carbon atoms to which they are attached, form an optionally R_{26} - and/or R_{27} -substituted aryl or heteroaryl;

each of R_{24} , R_{29} and R_{30} independently is H; C_1 - C_6 alkyl; C_2 - C_6 alkoxyalkyl; C_1 - C_6 halogenoalkyl; C_3 - C_7 cycloalkyl; or optionally R_{26} - and/or R_{27} -substituted aryl, aryl C_{1-4} alkyl or heteroaryl;

 R_{25} represents 1 to 4 substituents each independently having one of the significances given for R_{10-23} above;

 R_{26} represents 1 to 4 substituents each independently selected from C_1 - C_6 alkyl; C_1 - C_6 hydroxyalkyl; C_2 - C_6 alkoxyalkyl; C_1 - C_6 halogenoalkyl; C_3 - C_6 cycloalkyl; C_2 - C_6 alkoxyalkyl; C_1 - C_6 halogenoalkyl; C_3 - C_6 cycloalkyl; C_2 - C_6 alkynyl; aryl; heteroaryl; heteroaryl N-oxide; F; Cl; Br; I; OH; OR₄; CONH₂; CONH₂; CONH₄; OC(O)R₄; OC(O)OR₄; OC(O)NHR₄; OC(O)NR₄R₄; OSO₂R₄; COOH; COOR₄; CF₃; CHF₂; CH₂F; CN; NO₂; NH₂; NHR₄; NR₄R₄; NHC(O)R₄; NR₄C(O)R₄; NHC(O)NHR₄; NHC(O)NHR₄; NHC(O)OR₄; NR₄C(O)OR₄; NHSO₂R₄; N(SO₂R₄)₂; NR₄SO₂R₄; SR₄; S(O)R₄; SO₂R₄; Si(CH₃)₃ and B(OC(CH₃)₂)₂;

 R_{27} represents two adjacent substituents which form an annulated 4-7 membered nonaromatic ring optionally containing up to two heteroatoms selected independently from N, O and S;

 R_{31} is C_1 - C_6 alkyl; C_3 - C_7 cycloalkyl; optionally R_{26} - and/or R_{27} -substituted aryl, aryl C_{1-4} alkyl or heteroaryl; or $CF_{3:}$

or a pharmaceutically acceptable salt thereof.

2. A compound according to claim 1 which is selected from 1,3-Dicyclohexyl-2-(5,6-dihydro-imidazo[2,1-b]thiazol-3-ylmethyl)-isothiourea, 1-Cyclohexyl-3-cyclohexyl-2-(5,6-dihydro-imidazo[2,1-b]thiazol-3-ylmethyl)-isothiourea,1-Cycloheptyl-3-cyclohexyl-2-(5,6-dihydro-imidazo[2,1-b]thiazol-3-ylmethyl)-isothiourea,1,3-Dicycloheptyl-2-(5,6-dihydro-imidazo[2,1-b]thiazol-3-ylmethyl)-isothiourea, 1-Cyclohexyl-3-cyclooctyl-2-(5,6-dihydro-imidazo[2,1-b]thiazol-3-ylmethyl)-isothiourea, 1-Cyclohexyl-3-cyclooctyl-2-(5,6-dihydro-imidazo[2,1-b]thiazol-3-ylmethyl

imidazo[2,1-b]thiazol-3-ylmethyl)-isothiourea,1,3-Dicyclohexyl-2-(6,6-dimethyl-5,6-dihydro-imidazo[2,1-b]thiazol-3-ylmethyl)-isothiourea,1,3-Dicyclohectyl-2-(5,6-dihydro-imidazo[2,1-b]thiazol-3-ylmethyl)-isothiourea and 1,3-Dicycloheptyl-2-(6,6-dimethyl-5,6-dihydro-imidazo[2,1-b]thiazol-3-ylmethyl)-isothiourea.

- 3. A pharmaceutical composition comprising a compound according to claim 1 in free form or in a pharmaceutically acceptable salt form in association with a pharmaceutically acceptable diluent or carrier therefor.
- 4. Use of a compound according to claimed in claim 1 in free form or in a pharmaceutically acceptable salt form, for the manufacture of a medicament to prevent or treat disorders or diseases mediated by interactions between chemokine receptors, acute or chronic transplant rejection, inflammatory diseases, autoimmune diseases or proliferative diseases.
- 5. Use of a compound according to claimed in claim 1 in free form or in a pharmaceutically acceptable salt form, for the manufacture of a medicament to prevent or inhibit tumor invasiveness, symptoms associated with tumor growth, metastatic spread of tumours, tumor-associated angiogenesis or growth of micrometastases.
- 6. Use of a compound as claimed in claim 1 or in claim 2, or a pharmaceutically acceptable salt thereof, for the manufacture of a medicament in preventing or combating an infectious diseases, in particular viral infections or progression of AIDS.
- 7. A process for preparing a compound of formula I comprising reacting a compound of formula II

$$\begin{array}{cccc}
R_3 & & & & & & & & \\
& & & & & & & & \\
R_6 & & & & & & & & \\
R_5 & & & & & & & \\
\end{array}$$

with a compound of formula III

$$R_{\overline{2}}$$
 $R_{\overline{32}}$

wherein R₁ to R₆ are as defined in claim 1 and R₃₂ is a leaving group;

and optionally converting a resultant compound of formula I obtained in free form to a salt form or vice versa.

- 8. A pharmaceutical combination comprising a compound according to claim 1 or claim 2 in free form or in a pharmaceutically acceptable salt form and a further agent selected from immunosuppressive, immunomodulating, anti-inflammatory, antiproliferative, antineoplatic, chemotherapeutic, anti-infective, anti-viral, and antibiotic agents, and agents for the treatment of acute myeloid leukemia.
- 9. Combination according to claim 8 comprising an antiretroviral agent, in particular an anti-HIV agent.
- 10. Use of a combination according to claim 9 for the manufacture of a medicament for preventing or combating an infectious disease, in particular viral infection or progression of AIDS.
- 11. A method of treatment or prevention of any of the following conditions:
- i) disorders or diseases mediated by interactions between chemokine receptors,
- ii) acute or chronic transplant rejections,
- iii) inflammatory or autoimmune diseases,
- iv) proliferative diseases,
- v) symptoms associated with tumor invasiveness or tumor growth,
- vi) metastatic spreads of tumours, tumor-associated angiogenesis and growths of micrometastases,
- vii) infectious diseases, in particular viral infections, in particular binding or entry of HIV virus, or progression of AIDS,

comprising administering to said subject a therapeutically effective amount of a compound according to claim 1 or claim 2, or a or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition according to claim 3.